**Assignment 4,1**

1. Histogram for all variables in a dataset mtcars. Write a program to create histograms for all columns.

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> View(mtcars)

> library(purrr)

> library(tidyr)

> library(ggplot2)

> mtcars %>%

+ keep(is.numeric) %>%

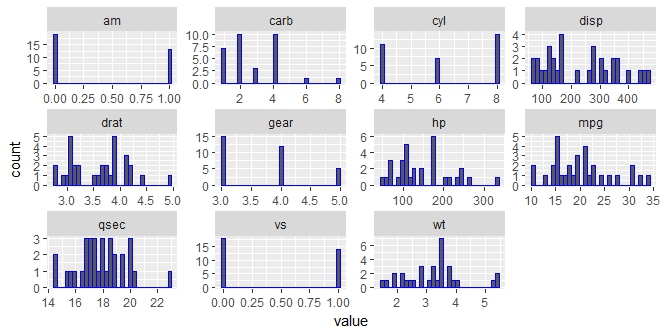
+ gather() %>%

+ ggplot(aes(value)) +

+ facet\_wrap(~ key,scales = "free") +

+ geom\_histogram(col="blue")

`stat\_bin()` using `bins = 30`. Pick better value with `binwidth`.



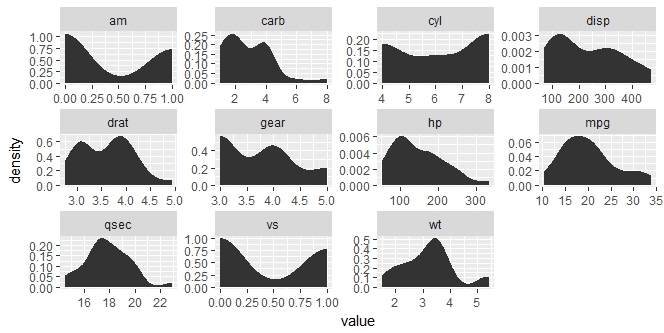
2.Check the probability distribution of all variables in mtcars

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| > library(ggplot2)  > mtcars %>%  + keep(is.numeric) %>%  + gather() %>%  + ggplot(aes(value)) +  + facet\_wrap(~ key,scales = "free") +  + stat\_density() |
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#stat\_bin is suitable only for continuous x data.

#If our x data is discrete, we probably want to use stat\_count.

#we can also use geom\_density function



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1. Write a program to create boxplot for all variables.

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| > library(ggplot2)  > library(reshape)  Attaching package: ‘reshape’  The following objects are masked from ‘package:tidyr’:  expand, smiths  > m1 <- melt(mtcars)  Using as id variables  > ggplot(m1,aes(x = variable,y = value)) + facet\_wrap(~variable) + geom\_boxplot() |
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